

<b>LLNL Environmental Restoration Division Standard Operating Procedure</b>		<b>TITLE: Data Management Printed Analytical Result Receipt and Processing</b>
<b>APPROVAL</b>	<b>Date</b>	<b>PREPARERS:</b> <b>C. S. Chamberlain, S. Lambaren, P. Ottesen, and H. Lew</b>
<hr/> <b>Data and Information Management Group Leader</b>	<hr/>	<b>REVIEWERS:</b> <b>D. Burruss, V. Dibley, B. Failor*, C. Garcia*, N. Hankla*, R. Higgins, J. Nelson-Lee*, W. Schwartz*, K. Stanford*, R. Ward*, and C. Wells</b>
<b>APPROVAL</b>	<b>Date</b>	<b>PROCEDURE NUMBER:</b> <b>ERD SOP-5.1</b>
<hr/> <b>Division Leader</b>	<hr/>	<b>REVISION: 2</b>
<b>CONCURRENCE</b>	<b>Date</b>	<b>EFFECTIVE DATE:</b> <b>December 1, 1995</b>
<hr/> <b>QA Implementation Coordinator</b>	<hr/>	<b>Page 1 of 6</b>

\*Operations and Regulatory Affairs Division

## 1.0 PURPOSE

The purpose of this procedure is to establish the means for receiving, copying, distributing, and storing printed analytical results as received from analytical laboratories. This procedure is to ensure complete and consistent handling of all printed analytical results within the Environmental Restoration Division (ERD) Data Management Group (DMG).

## 2.0 APPLICABILITY

This procedure applies to personnel performing quality affecting activities in the receipt, copying, and distribution of printed analytical results, constituting Quality Assurance (QA) records, for the Environmental Protection Department (EPD) Quality Assurance Management Plan (QAMP).

## 3.0 REFERENCES

3.1 LLNL EPD Quality Assurance Management Plan (QAMP).

Procedure No. ERD SOP-5.1	Revision Number 2	Effective Date September 1, 1995	Page 2 of 6
------------------------------	----------------------	-------------------------------------	-------------

## **4.0 DEFINITIONS**

### **4.1 Analytical Result**

Report of data obtained from analysis, observation, or measurement.

### **4.2 Chain-of-Custody (CoC)**

A method and record used for documenting the history and sequential possession of a sample from the time of collection or generation through analysis and data reporting.

### **4.3 Data Reference Library (Division)**

An area designated as ERD's center for easily accessible storage of data.

### **4.4 EOG**

The Environmental Operations Group of ORAD.

### **4.5 HE Data**

The results from analytical testing for high explosive compounds.

### **4.6 Log Number**

The number used as the unique identifier of a sample collected by LLNL, usually assigned by the analytical laboratory.

### **4.7 ORAD**

The Operations and Regulatory Affairs Division.

### **4.8 Quality Assurance/Quality Control (QA/QC) Data**

A report of data used to evaluate the validity of analytical results, determining the quality of the analytical data.

### **4.9 Records Center (Division)**

A facility, or area within a facility designated as ERD's storage site for QA Records.

### **4.10 Result Receipts File**

An Excel spreadsheet file where log numbers, CoC access numbers, and date of receipt for analytical results are recorded electronically.

### **4.11 TAGG**

The Tank Assessments and Guidance Group of ORAD.

Procedure No. ERD SOP-5.1	Revision Number 2	Effective Date September 1, 1995	Page 3 of 6
------------------------------	----------------------	-------------------------------------	-------------

## **4.12 WGMG**

The Water Guidance and Monitoring Group of the Environmental Monitoring Program within ORAD.

## **5.0 RESPONSIBILITIES**

### **5.1 Analytical Laboratories**

Analytical laboratories are responsible for submitting analytical results using the LLNL electronic format for data deliverables and hard copy originals within specified time periods to ERD's DMG. The analytical laboratories are also responsible for making corrections or revisions to electronic files and hard copy original reports requested by the DMG.

### **5.2 Division Leader**

The Division Leader's responsibility is to ensure that all activities performed by ERD at the Livermore Site and Site 300 are performed safely and comply with all pertinent regulations and procedures, and provide the necessary equipment and resources to accomplish the tasks described in this procedure.

### **5.3 Data Management Group (DMG)**

The DMG's responsibility is to receive analytical results and process them as outlined in this SOP procedure. The DMG also communicates with the analytical laboratories regarding clarification or additional information necessary for completeness in analytical result reports.

### **5.4 Records Control Coordinator (RCC)**

The RCC or designee(s) at the Division Record Center has the responsibility for receiving, storing, and maintaining the QA Records specified in this procedure.

## **6.0 PROCEDURE**

### **6.1 Original Results Receipt**

- 6.1.1 Original hard copy analytical results are separated from incoming mail or retrieved from the courier lock box.
- 6.1.2 Original analytical results are date stamped, grouped by Livermore Site or Site 300, and directed to the appropriate QA/QC Chemist for validation. The QA/QC Chemist is to be notified if WGMG ORAD data is received, since validation is to be expedited.
- 6.1.3 Record each laboratory log number, CoC access number, and date of receipt in the Result Receipts File.

Procedure No. ERD SOP-5.1	Revision Number 2	Effective Date September 1, 1995	Page 4 of 6
------------------------------	----------------------	-------------------------------------	-------------

## **6.2 Non-Original Results**

- 6.2.1 Non-original results, generated from WGMG, EOG, or TAGG (ORAD), are date stamped.
- 6.2.2 WGMG, EOG, or TAGG (ORAD) data results, cover sheets, and CoC forms are stapled, stamped with the Data Reference Library stamp, and filed by sample location/date. The original QA/QC hard copy data results are filed in binders. Each binder is referenced by an analytical laboratory and log number.

## **6.3 Processing of HE Data from LLNL Chemistry and Material Science**

- 6.3.1 Original data are received by electronic mail (print if necessary) or regular mail.
- 6.3.2 Assign log numbers using the following example:

MSB93Q4-XX

MS = two-letter laboratory code, followed by B

93 = year,

Q4- = fourth quarter, followed by a hyphen, and

XX = sample number.

The next number up is tracked in the HE data binder.

- 6.3.3 Locate all corresponding CoCs, and copy and attach to the original HE data. CoCs are located in the "Site 300 Waiting for Data" bins.
- 6.3.4 To process data from the beginning distribution process, place the original HE data with attached CoC copies in the new data box located in the data receiving bins.
- 6.3.5 Place a copy of the HE data and their assigned log numbers under the appropriate year and quarter in the binder labeled HE DATA BINDER.

## **6.4 Livermore Site Analytical Results**

- 6.4.1 After original hard copy results have been validated, locate any blind samples, label with the stamp "This is Really," and add the actual sample location based on the quarter and year from the QA sample list provided by the sampling coordinator.
- 6.4.2 After original hard copy results have been validated, determine the number of required copies from the following sources:
  - A. Electronic or hand-entry data comparison.
  - B. Customers listed on the information sheets or distribution list.
  - C. Individuals listed in the "internal use only" box on the CoC form in the lower right corner.
  - D. Data Reference Library file (note: a copy for each sample location listed on an individual sheet.

<b>Procedure No.</b> <b>ERD SOP-5.1</b>	<b>Revision Number</b> <b>2</b>	<b>Effective Date</b> <b>September 1, 1995</b>	<b>Page 5 of 6</b>
--	------------------------------------	---	--------------------

- 6.4.3 After determining the number of copies, copy all original CoC forms, cover letters, and data sheets. Extra copies of the QA/QC data sheets are only necessary for data to be delivered to WGMG analysts.
- 6.4.4 Separate the copies by the originals, data comparison, customers, and library. Attach a blank WGMG Analyst Approval Form to each package for a WGMG analyst.
  - 6.4.4.1 WGMG Analyst Approval
    - When the WGMG Analyst Approval form is returned, update the electronic record in EPDData appropriately. File the WGMG Analyst Approval form in the Data Reference Library.
- 6.4.5 Send customer copies through the Laboratory mail, or more direct means if necessary.
- 6.4.6 Restaple and place the originals in the CoC “incoming bin” for the Livermore Site.
- 6.4.7 After matching the CoCs with the originals, results are filed by analytical laboratory and date received. Data results are stored and maintained as Lifetime QA Records in ERD’s DMG Records Center.
  - 6.4.7.1 Check for late receipt of analytical results by periodically retrieving a list of all analyses that do not meet the requested turn around. Provide the list to resource management staff, so they can adjust payment appropriately.
- 6.4.8 Separate the data comparison copies by analytical laboratory. Place the electronic laboratory results in the appropriate bins in the electronic data area and sort by analytical laboratory, and remaining copies in the bins for hand entry. Place revision copies in the “revision” bin.
- 6.4.9 Separate the Data Reference Library copies by sample location. Stamp all library copies “Data Reference Library Copy.” Hole punch each copy and file by reverse chronological order based on location and sample date.

## **6.5 Site 300 Analytical Results**

- 6.5.1 After original hard copy results have been validated, locate any blind samples, label with the stamp “This is Really”, and add the actual sample location based on the quarter and year from the QA sample list provided by the sampling coordinator.
- 6.5.2 Determine the number of copies required from the following sources:
  - A. Electronic or hand-entry data comparison.
  - C. Customers listed on the information sheets or distribution list.
  - D. Individual(s) listed on the CoC form in the “internal use only” box (lower right corner).
  - E. Data Reference Library file (note: a copy for each sample location listed on an individual sheet.
- 6.5.3 After determining the number of copies, copy all original CoCs, cover letters, and data sheets. Extra copies of the QA/QC data sheets are only necessary for data to be delivered to WGMG analysts.
- 6.5.4 Separate the copies by originals, data comparison, customers, and library. Attach a blank WGMG Analyst Approval Form to each package for a WGMG analyst.

Procedure No. ERD SOP-5.1	Revision Number 2	Effective Date September 1, 1995	Page 6 of 6
------------------------------	----------------------	-------------------------------------	-------------

#### 6.5.4.1 WGMG Analyst Approval

When the WGMG Analyst Approval form is returned, update the electronic record in EPDDData appropriately. File the WGMG Analyst Approval form in the Data Reference Library.

- 6.5.5 Send the customer copies through the Laboratory mail, or more direct means if necessary.
- 6.5.6 Restaple and place the originals in the CoC “incoming bin” for Site 300.
- 6.5.7 After matching CoCs with the originals, results are filed by analytical laboratory and date received. Data results are stored and maintained as Lifetime QA Records in the ERD’s DMG Records Center.
  - 6.5.7.1 Check for late receipt of analytical results by periodically retrieving a list of all analyses that do not meet the requested turn around. Provide the list to resource management staff, so they can adjust payment appropriately.
- 6.5.8 Separate the data comparison copies by analytical laboratory. Place the electronic laboratory results in the appropriate bins in the electronic data area and sort by analytical laboratory, and remaining copies in the bins for hand entry. Place revisions copies in the “revision” bin.
- 6.5.9 Separate the Data Reference Library copies by sample location. Stamp all library copies “Data Reference Library Copy.” Hole punch each copy and file by reverse chronological order based on location and sample date.

## 7.0 QA RECORDS

- 7.1 Hard copy analytical laboratory reports and copies (including revisions) stamped with the appropriate red stamp (i.e., Environmental Restoration Division, Data Reference Library Copy, or Data Management Group).
- 7.2 All hard copy analytical QA/QC reports and copies
- 7.3 Electronically stored hard copy analytical data
- 7.4 Chain-of-Custody form
- 7.5 ERD Controlled Field Logbooks

## 8.0 ATTACHMENTS

Not applicable.